

SF

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/816,810	THOMAS ET AL.	
	Examiner	Art Unit	
	Phuong Phu	2611	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to 10/4/06.
2.  The allowed claim(s) is/are 6,7,10,12 and 13.
3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All
  - b)  Some\*
  - c)  None
 of the:
  1.  Certified copies of the priority documents have been received.
  2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftsperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application
6.  Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_.

### **EXAMINER'S AMENDMENT**

1. This Office Action is responsive to the Amendment filed on 10/4/06.
2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney Jeanette Harms on 10/12/06.

The application has been amended as follows:

#### **IN THE CLAIMS:**

-In claim 12, line 9, a phrase --hopping according to a determined hopping sequence-- is inserted after the limitation "frequency hopping interferer".

### **REASONS FOR ALLOWANCE**

3. Claims 6, 7, 10, 12 and 13 are allowed.
4. The following is an examiner's statement of reasons for allowance:

-Regarding to independent claim 6, none of prior art of record teaches or suggests a method comprising procedure of decoding a plurality of encoded data bits in a manner de-emphasizing a subset of the plurality of encoded data bits, the de-emphasizing being based on an estimate of the likelihood of the subset having been received correctly wherein the estimate is determined based upon known training patterns to determine which bits will be undesirable, wherein the training patterns are received and examined to find a statistics of errors.

-Regarding to independent claim 7, none of prior art of record teaches or suggests a method comprising procedure of decoding a plurality of encoded data bits in a manner de-emphasizing a subset of the plurality of encoded data bits, the de-emphasizing being based on an estimate of the likelihood of the subset having been received correctly wherein the estimate is determined based upon an error rate among training patterns.

-Regarding to independent claim 10, none of prior art of record teaches or suggests a method comprising procedure of decoding a plurality of encoded data bits in a manner de-emphasizing a subset of the plurality of encoded data bits, the de-emphasizing being based on an estimate of the likelihood of the subset having been received correctly wherein the estimate is determined based upon checking a SNR of each of a plurality of bins and weighting accordingly using Maximum Likelihood criteria, derived from before and after decoding.

-Regarding to independent claim 12, none of prior art of record teaches or suggests a method comprising procedure of decoding a plurality of encoded data bits in a manner de-emphasizing a subset of the plurality of encoded data bits, the de-emphasizing being based on an estimate of the likelihood of the subset having been received correctly wherein the estimate is determined based upon a change to a determined frequency hopping interferer hopping according to a determined hopping sequence.

-Regarding to independent claim 13, none of prior art of record teaches or suggests a method comprising procedure of decoding a plurality of encoded data bits in a manner de-emphasizing a subset of the plurality of encoded data bits, the de-emphasizing being based on an estimate of the likelihood of the subset having been received correctly wherein the estimate is

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determined based upon interpolating frequency bins selected for puncturing based on frequency offset estimation.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Phu whose telephone number is 571-272-3009. The examiner can normally be reached on M-F (8:00 AM - 4:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**PHUONG PHU  
PRIMARY EXAMINER**

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Primary Examiner  
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